Section 1: Product and Company Identification

Product Name: Terroxy® Resin Systems — Joint Filler Hardener, Part B
Product Use Description: Curing Agent, Epoxy
Company: Terrazzo & Marble Supply Companies
77 South Wheeling Road
Wheeling, Illinois 60090
Telephone: 847.353.8000
Emergency Telephone: 800.424.9300 - USA
01.703.527.3887 - International

Section 2: Hazards Identification

Classification of the mixture:
- Skin corrosion – Category 1B
- Skin sensitization – Category 1
- Serious eye damage – Category 1
- Reproductive toxicity – Category 2
- Acute toxicity – Category 4

Classification according to Regulation (EC) No 1272/2008

GHS Label elements:

Hazard Pictogram:

- !
- ♂
- ⚠

Signal Word: Warning

Hazard Statements:
- H302 Harmful if swallowed
- H314 Causes severe skin burns and eye damage
- H332 Harmful if inhaled
- H335 May cause respiratory irritation

Precautionary Statements:
- P261 Avoid breathing mist/vapors/spray
- P264 Wash hands and skin contact areas thoroughly after handling
- P272 Contaminated work clothing should not be allowed out of the workplace P273 Avoid release to the environment
- P280 Wear protective gloves/eye/face protection
- P301, P330, P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P301, P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you fell unwell
- P303, P353, P361 IF ON SKIN: Remove/take off immediately all contaminated clothing. Rinse skin with water/shower
- P305, P351, P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do, continue rinsing
- P310: Immediately call a POISON CENTER or doctor/physician
- P333, P313 If skin irritation or rash occurs: Get medical advice/attention
- P362 Take off contaminated clothing and wash before reuse P391 Collect spillage
- P501 Dispose of content/container through a waste management company authorized by the local government

Other hazards not classified: None Known
Section 3: Composition / Information on Ingredients

This product is a mixture.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS#</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrenated phenol</td>
<td>61788-44-1</td>
<td>&gt; 25.0 - &lt; 80.0%</td>
</tr>
<tr>
<td>Aromatic hydrocarbon</td>
<td>Trade secret</td>
<td>&gt; = 2.0 - &lt;= 75.0%</td>
</tr>
<tr>
<td>Aminoethylpiperazine</td>
<td>140-31-8</td>
<td>&gt; = 1.5 - &lt;= 15.0%</td>
</tr>
</tbody>
</table>

N/E - Not Established
ALL ingredients are registered on TSCA.
The remaining components are trade secret.

Section 4: First Aid Measures

General advice:
Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

Eye contact:
Flush eyes with plenty of water for at least 15 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

Skin contact:
Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Initiate and maintain gentle and continuous irrigation until the patient receives medical care. Cover wound with sterile dressing. Take off contaminated clothing and shoes immediately.

Ingestion:
Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim’s head to the side.

Inhalation:
Move to fresh air.

Section 5: Fire Fighting Measures

Suitable extinguishing media:
- Alcohol-resistant foam
- Carbon dioxide (CO2)
- Dry chemical
- Dry sand
- Limestone powder

Specific hazards:
May generate ammonia gas. May generate toxic nitrogen oxide gases. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from fire fighting to enter drains or water courses. Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated. Burning produces obnoxious and toxic fumes.

Special protective equipment for fire-fighters:
Avoid contact with the skin. A face shield should be worn. Use personal protective equipment. Wear for fire-fighters: self-contained breathing apparatus for fire fighting if necessary.

Further information:
Do not allow run-off from fire fighting to enter drains or water courses.
OSHA Flammability Class: Combustible Class III B
Section 6: Accidental Release Measures

Personal precautions: Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.

Environmental precautions: Construct a dike to prevent spreading.

Methods for cleaning up: Approach suspected leak areas with caution. Contact Terrazzo and Marble Response Center for advice. Place in appropriate chemical waste container.

Additional advice: If possible, stop flow of product. Avoid contact. Allow only personnel wearing goggles, neoprene or rubber gloves and protective clothing to clean up spill. In confined areas a full face respirator is recommended. Absorb spill with clay, diatomaceous earth or other absorbent materials. Place in disposal containers.

Section 7: Handling and Storage

Handling: Avoid contact with eyes. Avoid contact with skin and eyes. Adhere to work practice rules established by government regulations. Use personal protective equipment. When using, do not eat, drink or smoke.

Storage: Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place. Do not remove labels from empty containers. If mixtures of Part B and Part A are allowed to remain in the mixing container past the pot life deadline, heat and a strong reaction will result.

Technical Measures /Precautions: Do not store in reactive metal containers.

Section 8: Exposure Controls / Personal Protection

Personal Protective Equipment:

Respiratory Protection: If vapor or mist is generated and the occupational exposure limit is exceeded, use appropriate NIOSH/MSHA approved self contained breathing equipment or a full face respirator. Respirators should be selected by and used following requirements found in OSHA’s respirator standards (29 CFR 1910.134). Not required for properly ventilated areas.

Ventilation: Mechanical ventilation required if TLV is expected to be exceeded in confined areas.

Hand Protection: Recommend wearing disposable latex or nitrile gloves when mixing to protect against incidental contact. If continuous contact is expected, recommend butyl rubber gloves be worn.

Eye Protection: Wear safety glasses with side shields or safety goggles when handling this product. Additionally, wear a face shield when the possibility of splashing liquid exists. Do not wear contact lens. Have an eye wash station available.

Skin and Body Protection: Prevent contact with this product. Long sleeve shirts and trouser without cuffs and/or apron is recommended if splashing liquids exists. Other protective equipment may be needed depending on condition use.

Exposure Limit:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrenated phenol</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Aromatic hydrocarbon</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Aminoethylpiperazine</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
</tbody>
</table>
Section 9: Physical and Chemical Properties

- **Color:** Clear
- **Odor:** Amine
- **Odor Threshold:** No Test Data Available
- **pH:** Not Applicable
- **Melting Point:** No Test Data Available
- **Freezing Point:** No Test Data Available
- **Boiling Point (760 mmHg):** Not Available
- **Flash Point - Closed Cup:** Not Available
- **Flash Point - Open Cup:** No Test Data Available
- **Flammable Limits in Air:**
  - **Lower:** No Test Data Available
  - **Upper:** No Test Data Available
- **Vapor Pressure:** No Data Available
- **Vapor Density (air =1):** Not Available
- **Specific Gravity (H2O = 1):** No Data Available
- **Solubility in water (by weight):** No Data Available
- **Partition coefficient, n-octanol/water (log Pow):** No Data Available. See Section 12 for individual component data.
- **Autoignition Temperature:** No Test Data Available
- **Decomposition Temperature:** No Test Data Available
- **Dynamic Viscosity:** No Test Data Available

Stability:

Stable under normal conditions.

Conditions to Avoid:

Contact with acids such as Hydrochloric or Sulfuric.

Materials to Avoid:

- Sodium hypochlorite.
- Organic acids (i.e. acetic acid, citric acid etc.).
- Mineral acids.
- Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.
- Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.
- Reactive metals (e.g. sodium, calcium, zinc etc.).
- Materials reactive with hydroxyl compounds.
- Oxidizing agents
- Epoxy resins under uncontrolled conditions.

Hazardous Decomposition Products:

- Nitric acid
- Ammonia
- Nitrogen oxides (NOx)
- Nitrogen oxide can react with water vapors to form corrosive nitric acid.
- Carbon monoxide
- Carbon dioxide (CO2)
- Aldehydes
- Flammable hydrocarbon fragments (e.g., acetylene).
- When exposed to fire, oxides of Carbon and Nitrogen will be generated.

Hazardous Polymerization:

Will not occur.

Section 10: Reactivity Data

Stability:

Stable under normal conditions.

Conditions to Avoid:

Contact with acids such as Hydrochloric or Sulfuric.

Materials to Avoid:

- Sodium hypochlorite.
- Organic acids (i.e. acetic acid, citric acid etc.).
- Mineral acids.
- Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.
- Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.
- Reactive metals (e.g. sodium, calcium, zinc etc.).
- Materials reactive with hydroxyl compounds.
- Oxidizing agents
- Epoxy resins under uncontrolled conditions.

Hazardous Decomposition Products:

- Nitric acid
- Ammonia
- Nitrogen oxides (NOx)
- Nitrogen oxide can react with water vapors to form corrosive nitric acid.
- Carbon monoxide
- Carbon dioxide (CO2)
- Aldehydes
- Flammable hydrocarbon fragments (e.g., acetylene).
- When exposed to fire, oxides of Carbon and Nitrogen will be generated.

Hazardous Polymerization:

Will not occur.
Section 11: Toxicological Information

Acute Health Hazard
Ingestion: LD50 : > 1,620 mg/kg
Species: Rat
Method: Estimated

Inhalation: LC50 (1 h) : > 20 mg/l
Species: Rat
Method: Estimated

Skin: LD50 : > 1,000 mg/kg
Species: Rabbit
Method: Estimated

Eye irritation/corrosion: Severe eye irritation.

Acute dermal irritation/corrosion: Severe skin irritation. Corrosive to the skin of a rabbit.

Sensitization: May cause sensitization by skin contact.

Chronic Health Hazard
The product or a component may be mutagenic, the data is inconclusive.

Section 12: Ecological Information

Toxicity
Data for Component: Styrenated phenol
No relevant data found.

Data for Component: Aminoethylpiperazine
Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in most sensitive species tested).

Fish Acute & Prolonged Toxicity
LC50, Pimephales promelas (fathead minnow), static test, 96 h: 2,190 mg/l

Aquatic Invertebrate Acute Toxicity
EC50, Daphnia magna (Water flea), static test, 48 h, immobilization: 58 mg/l

Aquatic Plant Toxicity
ErC50, Pseudokirchneriella subcapitata (green algae), Growth rate inhibition, 72 h: > 1,000 mg/l

Data for Component: Hydrocarbon A
Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested). May increase pH of aquatic systems to > pH 10 which may be toxic to aquatic organisms.

Fish Acute & Prolonged Toxicity
LC50, Pimephales promelas (fathead minnow), static test, 96 h: 330 mg/l
Aquatic Invertebrate Acute Toxicity
EC50, Daphnia magna (Water flea), static test, 48 h, immobilization: 31.1 mg/l

Aquatic Plant Toxicity
EC50, Pseudokirchneriella subcapitata (green algae), semi-static test, Growth rate inhibition, 72 h: 20 mg/l

Toxicity to Micro-organisms
EC50; Bacteria, 16h: 680 mg/l

Aquatic Invertebrates Chronic Toxicity Value
Daphnia magna (Water flea), semi-static test, 21 d, number of offspring, NOEC: 1.9 mg/l

Data for Component: **Hydrocarbon B**
Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).

Fish Acute & Prolonged Toxicity
LC50, Fish, static test, 96 h: 772 mg/l

Aquatic Invertebrate Acute Toxicity
EC50, Daphnia magna (Water flea), semi-static test, 48 h, immobilization: 80 mg/l

Aquatic Plant Toxicity
EC50, algae, static test, biomass growth inhibition, 72 h: 15 mg/l

Toxicity to Micro-organisms
EC50, activated sludge test (OECD 209), Respiration inhibition, 3 h: 750 mg/l

Data for Component: **Hydrocarbon C**
Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 > 100 mg/L in the most sensitive species tested).

Fish Acute & Prolonged Toxicity
LC50, Fish, 96 h: 0.5 mg/l

Aquatic Invertebrate Acute Toxicity
EC50, Daphnia magna (Water flea), 48 h: > 0.16 mg/l

Data for Component: **Hydrocarbon D**
Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).

Fish Acute & Prolonged Toxicity
LC50, Pimephales promelas (fathead minnow), 96 h: 640 mg/l

Aquatic Invertebrate Acute Toxicity
EC50, Daphnia magna (Water flea), semi-static test, 48 h, immobilization: 22 mg/l

Aquatic Plant Toxicity
ErC50, Desmodesmus subspicatus (green algae), growth rate inhibition, 72 h: 353.6 mg/l

Toxicity to Micro-organisms
EC50; Bacteria, 16 h: 5,000 mg/l

Data for Component: **Hydrocarbon E**
Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).

Fish Acute & Prolonged Toxicity
LC50, Poecilia reticulata (guppy), semi-static test, 96 h: 430 mg/l

Aquatic Invertebrate Acute Toxicity
EC50, Daphnia magna (Water flea), semi-static test, 48 h, immobilization: 16 mg/l

Aquatic Plant Toxicity
ErC50, Pseudokirchneriella subcapitata (green algae), static test, growth rate inhibition, 72 h: 1,164 mg/l

Toxicity to Micro-organisms
EC50; Bacteria, static test, 16 h: 5,000 mg/l
**Fish Chronic Toxicity Value (ChV)**
Fish, semi-static test, 28 d, growth, NOEC, NOEC: > 10 mg/l

**Aquatic Invertebrates Chronic Toxicity Value**
Daphnia magna (Water flea), semi-static test, 21 d, number of offspring, NOEC: 5.6 mg/l

---

**Data for Component: Hydrocarbon F**
Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).

**Fish Acute & Prolonged Toxicity**
LC50, Poecilia reticulata (guppy), semi-static test, 96 h: 640 mg/l

**Aquatic Invertebrate Acute Toxicity**
EC50, Daphnia magna (Water flea), semi-static test, 48 h, immobilization: 16.7 mg/l

**Aquatic Plant Toxicity**
EC50, Pseudokirchneriella subcapitata (green algae), static test, growth rate inhibition, 72 h: 645 mg/l
EbC50, Pseudokirchneriella subcapitata (green algae), biomass growth inhibition, 96 h: 151 mg/l

**Toxicity to Micro-organisms**
EC50, Bacteria, 16 h: 500 - 1,000 mg/l

**Fish Chronic Toxicity Value (ChV)**
Fish, 28 d, survival, NOEC, NOEC: > 10 mg/l

**Aquatic Invertebrates Chronic Toxicity Value**
Daphnia magna (Water flea), semi-static test, 21 d, number of offspring, NOEC: 0.16 mg/l

---

**Persistence and Degradability**

**Data for Component: Styrenated phenol**
No data available.

**Data for Component: Aminoethylpiperazine**
Material is not readily biodegradable according to OECD/EEC guidelines

<table>
<thead>
<tr>
<th>OECD Biodegradation Tests:</th>
<th>Biodegradation</th>
<th>Exposure Time</th>
<th>Method</th>
<th>10 Day Window</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0%</td>
<td>28 d</td>
<td>OECD 301F Test</td>
<td>Fail</td>
</tr>
</tbody>
</table>

**Indirect Photodegradation with OH Radicals**

<table>
<thead>
<tr>
<th>Rate Constant</th>
<th>Atmospheric Half-life</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.14E-10 cm³/s</td>
<td>0.05 d</td>
<td>Estimated.</td>
</tr>
</tbody>
</table>

**Chemical Oxygen Demand:** 1.84 mg/mg
**Theoretical Oxygen Demand:** 3.34 mg/mg

**Data for Component: Hydrocarbon A**
Biodegradation under aerobic static laboratory conditions is moderate (BOD20 or BOD28/ThOD between 10 and 40%).

<table>
<thead>
<tr>
<th>OECD Biodegradation Tests:</th>
<th>Biodegradation</th>
<th>Exposure Time</th>
<th>Method</th>
<th>10 Day Window</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0%</td>
<td>20 d</td>
<td>OECD 301D Test</td>
<td>Fail</td>
</tr>
</tbody>
</table>

**Biological oxygen demand (BOD):**

<table>
<thead>
<tr>
<th>BOD</th>
<th>BOD 10</th>
<th>BOD 20</th>
<th>BOD 28</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.000 %</td>
<td>2.5 - 11 %</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Theoretical Oxygen Demand:** 3.40 mg/mg
Data for Component: **Hydrocarbon B**
No appreciable biodegradation is expected.

**OECD Biodegradation Tests:**

<table>
<thead>
<tr>
<th>Biodegradation</th>
<th>Exposure Time</th>
<th>Method</th>
<th>10 Day Window</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>28 d</td>
<td>No information available.</td>
<td>Fail</td>
</tr>
</tbody>
</table>

Data for Component: **Hydrocarbon C**
Material is expected to be readily biodegradable.

Data for Component: **Hydrocarbon D**
Material is readily biodegradable. Passes OECD test(s) for ready biodegradability

**OECD Biodegradation Tests:**

<table>
<thead>
<tr>
<th>Biodegradation</th>
<th>Exposure Time</th>
<th>Method</th>
<th>10 Day Window</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 97%</td>
<td>28 d</td>
<td>OECD 301F Test</td>
<td>Pass</td>
</tr>
</tbody>
</table>

**Theoretical Oxygen Demand:** 2.77 mg/mg

Data for Component: **Hydrocarbon E**
Material is ultimately biodegradable (reaches > 70% biodegradation in OECD test(s) for inherent biodegradability). Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

**OECD Biodegradation Tests:**

<table>
<thead>
<tr>
<th>Biodegradation</th>
<th>Exposure Time</th>
<th>Method</th>
<th>10 Day Window</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 80 %</td>
<td>30 d</td>
<td>OECD 302A Test</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

**Indirect Photodegradation with OH Radicals**

<table>
<thead>
<tr>
<th>Rate Constant</th>
<th>Atmospheric Half-life</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.48E-10 cm3/s</td>
<td>0.87 h</td>
<td>Estimated.</td>
</tr>
</tbody>
</table>

**Biological oxygen demand (BOD):**

<table>
<thead>
<tr>
<th>BOD 5</th>
<th>BOD 10</th>
<th>BOD 20</th>
<th>BOD 28</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.000 %</td>
<td>46.000 %</td>
<td>70.000 %</td>
<td></td>
</tr>
</tbody>
</table>

**Theoretical Oxygen Demand:** 3.42 mg/mg

Data for Component: **Hydrocarbon F**
Material is readily biodegradable. Passes OECD test(s) for ready biodegradability

**OECD Biodegradation Tests:**

<table>
<thead>
<tr>
<th>Biodegradation</th>
<th>Exposure Time</th>
<th>Method</th>
<th>10 Day Window</th>
</tr>
</thead>
<tbody>
<tr>
<td>95 %</td>
<td>28 d</td>
<td>OECD 301C Test</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

**Theoretical Oxygen Demand:** 3.47 mg/mg

**Bioaccumulative potential**

Data for Component: **Styrenated phenol**
Bioaccumulation: No data available.

Data for Component: **Aminoethylpiperazine**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
**Partition coefficient, n-octanol/water (log Pow):** -1.48 Measured

Data for Component: **Hydrocarbon A**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
**Partition coefficient, n-octanol/water (log Pow):** -2.65 Estimated

Data for Component: **Hydrocarbon B**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
**Partition coefficient, n-octanol/water (log Pow):** 1.34 Measured
Section 12: Ecological Information (Continued)

Data for Component: **Hydrocarbon C**
- **Bioaccumulation:** Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).
- **Partition coefficient, n-octanol/water (log Pow):** >4

Data for Component: **Hydrocarbon D**
- **Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
- **Partition coefficient, n-octanol/water (log Pow):** -1.46 Measured
- **Bioconcentration Factor (BCF):** < 3.7; Cyprinus carpio (Carp); Measured

Data for Component: **Hydrocarbon E**
- **Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
- **Partition coefficient, n-octanol/water (log Pow):** -1.58 Estimated
- **Bioconcentration Factor (BCF):** < 0.3; Fish; Measured

Data for Component: **Hydrocarbon F**
- **Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
- **Partition coefficient, n-octanol/water (log Pow):** -1.6 Measured
- **Bioconcentration Factor (BCF):** < 0.07; Fish; Estimated

**Mobility in soil**

Data for Component: **Styrenated phenol**
- **Mobility in soil:** No data available.

Data for Component: **Aminoethylpiperazine**
- **Mobility in soil:** Expected to be relatively immobile in soil (Koc > 5000).
- **Partition coefficient, soil organic carbon/water (Koc):** 37,000 Estimated
- **Henry’s Law Constant (H):** 9.3E-09 atm*m3/mole; 20 °C Estimated

Data for Component: **Hydrocarbon A**
- **Mobility in soil:** Potential for mobility in soil is very high (Koc between 0 and 50).
- **Partition coefficient, soil organic carbon/water (Koc):** 4.1 - 310 Estimated
- **Henry’s Law Constant (H):** 5.21E-10 atm*m3/mole; 25 °C Estimated

Data for Component: **Hydrocarbon B**
- **Mobility in soil:** No relevant data found.
- **Henry’s Law Constant (H):** 1.06E-19 atm*m3/mole; 25 °C Estimated

Data for Component: **Hydrocarbon C**
- **Mobility in soil:** No relevant data found.

Data for Component: **Hydrocarbon D**
- **Mobility in soil:** Expected to be relatively immobile in soil (Koc > 5000). Given its very low Henry’s constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.
- **Partition coefficient, soil organic carbon/water (Koc):** 3.5 Estimated
- **Henry’s Law Constant (H):** 1.11E-08 PA*m3/mole; 25 °C Estimated

Data for Component: **Hydrocarbon E**
- **Mobility in soil:** Expected to be relatively immobile in soil (Koc > 5000). Given its very low Henry’s constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.
- **Partition coefficient, soil organic carbon/water (Koc):** 19,111 Estimated
- **Henry’s Law Constant (H):** 1.76E-08 atm*m3/mole Estimated

Data for Component: **Hydrocarbon F**
- **Mobility in soil:** Expected to be relatively immobile in soil (Koc > 5000). Given its very low Henry’s constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.
- **Partition coefficient, soil organic carbon/water (Koc):** 4,766 Estimated
- **Henry’s Law Constant (H):** 6E-01 Pa m3/mol; 25 °C Estimated
Section 13: Disposal Considerations

Waste from residues / unused products: Dispose in an approved incinerator or an approved landfill. Contact supplier if guidance is required.

Contaminated packaging: Dispose of container and unused contents in accordance with federal, state, and local requirements.

Section 14: Transport Information

DOT Non-Bulk
Proper shipping Name: CORROSIVE LIQUID, N.O.S.
Technical Name: (4-Nonylphenol,branched,Polyoxypropylenediamine)
Hazard Class: 8  ID Number: UN1760  Packing Group: PG III

IMDG
Proper shipping Name: CORROSIVE LIQUID, N.O.S.
Technical Name: (4-Nonylphenol,branched,Polyoxypropylenediamine)
Hazard Class: 8  ID Number: UN1760  Packing Group: PG III
EMS Number: F-A,S-B

ICAO/IATA
Proper shipping Name: CORROSIVE LIQUID, N.O.S.
Technical Name: (4-Nonylphenol,branched,Polyoxypropylenediamine)
Hazard Class: 8  ID Number: UN1760  Packing Group: PG III
Cargo Packing Instruction: 856
Passenger Packing Instruction: 852

Section 15: Regulatory Information

OSHA Hazard Communication Standard
This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200

Immediate (Acute) Health Hazard: Yes
Delayed (Chronic) Health Hazard: Yes
Fire Hazard: No
Reactive Hazard: No
Sudden Release of Pressure Hazard: No

Super-fund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 311 and 312

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

Pennsylvania (Worker and Community Right-to-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:
The following product components are cited in the Pennsylvania Hazardous Substance List and/or the Pennsylvania Environmental Substance List, and are present at levels which require reporting.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aromatic hydrocarbon</td>
<td>Trade secret</td>
<td>&gt;= 2.0 - &lt;= 75.0%</td>
</tr>
<tr>
<td>Aminoethylpiperazine</td>
<td>140-31-8</td>
<td>&gt;= 1.5 - &lt;= 15.0%</td>
</tr>
</tbody>
</table>
Section 15: Regulatory Information (Continued)

Pennsylvania (Worker and Community Right-to-Know Act): Pennsylvania Hazardous Substances List:
To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)
This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

US. Toxic Substance Control Act
All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

Section 16: Other Information

HMIS Rating

Health: 3  
Flammability: 1  
Reactivity: 0  
Physical hazard: C

Prepared by Terrazzo & Marble Supply Companies.

Data and recommendations presented herein are based upon ours and other researchers and are believed to be accurate. The products discussed are distributed without warranty (expressed or implied) and the customer shall make his own determination of suitability for his particular purpose.